

ATTACHMENT J24

Sheppard AFB Natural Gas Distribution System

Table of Contents

SHEPPARD AFB NATURAL GAS DISTRIBUTION SYSTEM	I
J24 SHEPPARD AFB NATURAL GAS DISTRIBUTION SYSTEM.....	J24-1
J24.1 SHEPPARD AFB OVERVIEW.....	J24-1
J24.2 NATURAL GAS DISTRIBUTION SYSTEM DESCRIPTION.....	J24-1
J24.2.1 Natural Gas Distribution System Fixed Equipment Inventory.....	J24-1
J24.2.1.1 Description.....	J24-2
J24.2.1.2 Inventory	J24-2
J24.2.2 Natural Gas Distribution System Non-Fixed Equipment and Specialized Tools.....	J24-3
J24.2.3 Natural Gas Distribution System Manuals, Drawings, and Records.....	J24-3
J24.3 SPECIFIC SERVICE REQUIREMENTS.....	J24-3
J24.4 CURRENT SERVICE ARRANGEMENT.....	J24-4
J24.5 SECONDARY METERING.....	J24-4
J24.5.1 Existing Secondary Meters.....	J24-4
J24.5.2 Required New Secondary Meters.....	J24-8
J24.6 SUBMITTALS.....	J24-8
J24.7 ENERGY SAVING PROJECTS.....	J24-9
J24.8 SERVICE AREA.....	J24-10
J24.9 OFF-INSTALLATION SITES.....	J24-10
J24.10 SPECIFIC TRANSITION REQUIREMENTS.....	J24-10
J24.11 GOVERNMENT RECOGNIZED SYSTEM DEFICIENCIES.....	J24-10

List of Tables

Fixed Inventory.....	J24-2
Spare Parts	J24-3
Specialized Vehicles and Tools.....	J24-3
Manuals, Drawings, and Records.....	J24-3
Existing Secondary Meters	J24-4
New Secondary Meters.....	J24-8
Service Connections and Disconnections.....	J24-10
System Deficiencies.....	J24-10

J24 Sheppard AFB Natural Gas Distribution System

J24.1 Sheppard AFB Overview

Sheppard AFB, located immediately north of Wichita Falls in Wichita County, Texas, is an Air Education and Training Command (AETC) installation that conducts technical, medical, field, and pilot training. The host command is the 82nd Training Wing (82 TRW), the largest of the four AETC technical training wings. The Base's primary tenant is the 80th Flying Training Wing (80 FTW), which trains pilots under the Euro-NATO Joint Jet Pilot Training (ENJJPT) Program.

Sheppard AFB occupies 5,719 acres and contains approximately 1,120 buildings with a total of 8.6 million square feet.¹ Four parallel runways bound the Base to the northeast, and approximately 220 functional aircraft (T-37s and T-38s) are assigned to the 80 FTW.

The Base has a total population of approximately 24,000, including military personnel, civilian employees and support personnel, students, and dependents. Sheppard AFB's annual payroll is approximately \$315 million (combined military and civilian), and the Base contributes significantly to the local economy through civilian employment, contracting, and purchases from local businesses.

J24.2 Natural Gas Distribution System Description

J24.2.1 Natural Gas Distribution System Fixed Equipment Inventory

The Sheppard AFB natural gas distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, pipelines, valves, regulators, and meters. The actual inventory of items sold will be established in the Bill of Sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the natural gas distribution system privatization are:

- None.

¹ The nonresidential structures include offices, industrial maintenance and repair facilities, and community service facilities such as Sheppard Hospital. The housing units include detached single residences, townhouses, Visiting Officers' Quarters (VOQs), Visiting Airmens' Quarters (VAQs), and Temporary Lodging Facilities (TLFs).

J24.2.1.1 Description

Natural gas is supplied to Sheppard AFB through one regulator station. This regulator station serves the main Base at 25 pounds per square inch gauge (psig). Another regulator station serves the Medical Training Center (also known as the Red Flag Area) at 12 psig. Natural gas is used to meet space and water heating requirements on Base, primarily in buildings. There are no natural gas fired air conditioners or compressed natural gas (CNG) fueling stations on Base.

The distribution system is looped so that, in nearly all locations, buildings can be fed from at least two different paths. Sheppard AFB has approximately 253,000 lf of piping.

Approximately 70 percent are PE and 30 percent is coated steel with sacrificial anode cathodic protection. The carbon steel sections were installed in the 1950s, and the cathodic protection was installed in the mid-1980s. The PE piping has been installed from the 1980s through today. The steel piping ranges from 4 inches to 3/4 inch and the PE piping ranges from 8 inches to 3/4 inch. Each building has at least one regulator to lower the gas pressure for equipment and appliance use (i.e., 7 inches of water to 1 psig).

J24.2.1.2 Inventory

Table 1 provides a general listing of the major natural gas distribution system fixed assets for the Sheppard AFB natural gas distribution system included in the sale.

TABLE 1
Fixed Inventory
Natural Gas Distribution System, Sheppard AFB

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
PE Gas Pipes	8	2,380	lf	1990
	6	2,750	lf	1990
	4	33,675	lf	1990
	3	7,270	lf	1990
	2	102,900	lf	1990
	1	28,440	lf	1990
	0.75	465	lf	1990
	10	980	lf	1963
Steel Gas Pipe	8	2,740	lf	1963
	6	17,550	lf	1963
	4	18,905	lf	1963
	3	1,140	lf	1963
	2.5	430	lf	1963
	2	28,915	lf	1963
	1.5	3,310	lf	1963
	1	1,145	lf	1963
Steel Plug Valves	6	36	ea.	1963
	4	38	ea.	1963
	3	3	ea.	1963
	2	58	ea.	1963
	1	3	ea.	1963
PE Ball Valves	6	6	ea.	1990
	4	68	ea.	1990

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
	3	15	ea.	1990
	2	206	ea.	1990
	1	57	ea.	1990
Large Regulators		-	ea.	1980
Small Regulators		253	ea.	1980
Large Meters	1 psi	32	ea.	1982
Small Meters	7 in. H ₂ O	128	ea.	1982
Sacrificial Anodes	32#	150	ea.	1985
SAS Test Stations	lot	70	ea.	1985

PE = Polyethylene LF = Linear Feet

EA = Each IN = Inches

PSI = Pounds per Square Inch

J24.2.2 Natural Gas Distribution System Non-Fixed Equipment and Specialized Tools

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the sale. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 2

Spare Parts

Natural Gas Distribution System, Sheppard AFB

Qty	Item	Make/Model	Description/Size	Remarks
	No spare parts are included in the privatization of this utility system.			

TABLE 3

Specialized Vehicles and Tools

Natural Gas Distribution System, Sheppard AFB

Qty	Item	Make/Model	Description	Remarks
4	Squeeze tool			
1	Calibration kit			

J24.2.3 Natural Gas Distribution System Manuals, Drawings, and Records

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4

Manuals, Drawings, and Records

Natural Gas Distribution System, Sheppard AFB

Qty	Item	Description	Remarks
1	CD	Utility System Drawings	Natural Gas Distribution System

J24.3 Specific Service Requirements

The service requirements for the Sheppard AFB natural gas distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Sheppard AFB natural gas distribution system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

- Leak detection surveys shall be performed IAW the Texas Railroad Commission (RRC) and 49 CFR 192 standards and frequencies. Sheppard Air Force Base is classified as a business district for the purpose 49 CFR 192.
- The Contractor shall provide monthly meter reading reports IAW Paragraph J24.6, and that meet the following requirements:
The Contractor shall keep meter books with monthly consumption and demand (if applicable) for each meter reading. Meter books shall also include building address or facility number, meter number, previous month readings, current month readings, multipliers for each meter, total monthly consumption, points of contact for meter questions, and procedure for converting meter reads into consumption (including multipliers). The Contractor shall coordinate with the Government to determine the format for meter books to be delivered.
- The contractor shall own, operate and maintain the natural gas cathodic protection system.
- The Contractor shall enter into a Memorandum of Understanding with the Sheppard Air Force Base Fire Department for fire protection of all facilities included in the purchase of the utility. The Contractor shall abide by Sheppard AFB fire protection requirements. The Contractor shall maintain the fire alarm system for all facilities included in the purchase of the utility. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.
- IAW Paragraph C.9.8, *Exercises and Crisis Situations Requiring Utility Support*, the Contractor shall provide support as directed by the Sheppard Air Force Base Civil Engineer Control Center or equivalent agency for exercises and crisis situations.

J24.4 Current Service Arrangement

Currently Lone Star Gas (LSG) supplies natural gas to Sheppard AFB. Sheppard AFB currently has a peak gas demand of nearly 60,000 MCF per month. Key projects planned for Sheppard may increase the total square footage of buildings on base by about 6 percent.

J24.5 Secondary Metering

The Installation may require secondary meters for internal billings of their reimbursable customers, utility usage management, and conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3.

J24.5.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW Paragraph C.3 and J24.6 below.

TABLE 5
Existing Secondary Meters
Natural Gas Distribution System, Sheppard AFB

Meter Location	Meter Description
Building 55, Auto Hobby	Natural Gas Meter

Meter Location	Meter Description
Building 57, Vehicle Services	Natural Gas Meter
Building 60, Print Shop	Natural Gas Meter
Building 61, Cold Storage	Natural Gas Meter
Building 100, Pharmacy	Natural Gas Meter
Building 120, Commissary	Natural Gas Meter
Building 125, Package Store	Natural Gas Meter
Building 127, ENJJPT Qtrs	Natural Gas Meter
Building 128, ENJJPT Qtrs	Natural Gas Meter
Building 129, ENJJPT Qtrs	Natural Gas Meter
Building 130, ENJJPT Qtrs	Natural Gas Meter
Building 131, ENJJPT Qtrs	Natural Gas Meter
Building 132, ENJJPT Qtrs	Natural Gas Meter
Building 133, ENJJPT Qtrs	Natural Gas Meter
Building 134, ENJJPT Qtrs	Natural Gas Meter
Building 147, Youth Center	Natural Gas Meter
Building 163, TLF	Natural Gas Meter
Building 195, Child Care	Natural Gas Meter
Building 195, East	Natural Gas Meter
Building 196, VOQ	Natural Gas Meter
Building 197, VOQ ENJJPT	Natural Gas Meter
Building 200, Ft Sill National Bank	Natural Gas Meter
Building 212, SF Credit Union	Natural Gas Meter
Building 237, Data Auto	Natural Gas Meter
Building 238, Barber Shop	Natural Gas Meter
Building 239, Main BX	Natural Gas Meter
Building 240, VOQ	Natural Gas Meter
Building 260, VOQ	Natural Gas Meter
Building 312, Library	Natural Gas Meter
Building 316, Legal Office	Natural Gas Meter
Building 318, South Bowling	Natural Gas Meter
Building 333, BOQ	Natural Gas Meter
Building 340, O Club	Natural Gas Meter
Building 384, Fitness/Gym Building	Natural Gas Meter
Building 400, HQ	Natural Gas Meter
Building 402, CBPO	Natural Gas Meter
Building 402, CBPO	Natural Gas Meter
Building 430, Rec Center	Natural Gas Meter
Building 450, Main Gym	Natural Gas Meter
Building 526, Dorm	Natural Gas Meter
Building 530, Dorm	Natural Gas Meter
Building 551, Post Office	Natural Gas Meter
Building 596, Dorm	Natural Gas Meter
Building 632, Dorm	Natural Gas Meter
Building 633, Dorm	Natural Gas Meter
Building 634, 82 Services Squadron	Natural Gas Meter
Building 649, Amn Club	Natural Gas Meter
Building 690, Misc Rec	Natural Gas Meter
Building 726, Boiler A	Natural Gas Meter

Meter Location	Meter Description
Building 726, Boiler B	Natural Gas Meter
Building 726, Dorm	Natural Gas Meter
Building 740, Mini Mall	Natural Gas Meter
Building 776, Dorm	Natural Gas Meter
Building 790, Dorm	Natural Gas Meter
Building 796, Family Services	Natural Gas Meter
Building 810, Chapel	Natural Gas Meter
Building 811, North Bowling	Natural Gas Meter
Building 825, North Gym	Natural Gas Meter
Building 832, Arts and Crafts	Natural Gas Meter
Building 840, Theater	Natural Gas Meter
Building 843, Trng Support Sq	Natural Gas Meter
Building 922	Natural Gas Meter
Building 960, Egress Training	Natural Gas Meter
Building 981, Weapons System Training	Natural Gas Meter
Building 966	Natural Gas Meter
Building 1012, Aircraft Maintenance	Natural Gas Meter
Building 1020, Graphics	Natural Gas Meter
Building 1025, 363 Munitions Training	Natural Gas Meter
Building 1035	Natural Gas Meter
Building 1045, Armament	Natural Gas Meter
Building 1093, Fire Station	Natural Gas Meter
Building 1100, Visitor Center	Natural Gas Meter
Building 1105, South Gas Station	Natural Gas Meter
Building 1108, NCO Club	Natural Gas Meter
Building 1200, Hospital	Natural Gas Meter
Building 1215, Chiller/Boiler Plant	Natural Gas Meter
Building 1364, PMEL	Natural Gas Meter
Building 1368, Dining Hall	Natural Gas Meter
Building 1400, North Gas Station	Natural Gas Meter
Building 1402, CE Administration	Natural Gas Meter
Building 1403, CE	Natural Gas Meter
Building 1404, CE	Natural Gas Meter
Building 1511, VOQ	Natural Gas Meter
Building 1600, Dorm Rec	Natural Gas Meter
Building 1601, Dorm	Natural Gas Meter
Building 1602, Dorm	Natural Gas Meter
Building 1603, Dorm	Natural Gas Meter
Building 1604, Dorm	Natural Gas Meter
Building 1624, CoE Thrift Shop	Natural Gas Meter
Building 1658, Religious Education Facility	Natural Gas Meter
Building 1660, Dorm	Natural Gas Meter
Building 1661, Dorm	Natural Gas Meter
Building 1662, Classroom	Natural Gas Meter
Building 1664, Inspector	Natural Gas Meter
Building 1900, H/C Scns Training	Natural Gas Meter
Building 1917, Dental/Biomed Training	Natural Gas Meter
Building 1921, CE Training	Natural Gas Meter

Meter Location	Meter Description
Building 1927, CE Training	Natural Gas Meter
Building 1928, CE Training	Natural Gas Meter
Building 1929, CE Training	Natural Gas Meter
Building 1937, CE Training	Natural Gas Meter
Building 1950, Comm Training	Natural Gas Meter
Building 1951, Boiler Room	Natural Gas Meter
Building 1954, Aerospace Propulsion	Natural Gas Meter
Building 1956, AGE Training	Natural Gas Meter
Building 2001, Heating Plant	Natural Gas Meter
Building 2012, Heating Plant	Natural Gas Meter
Building 2013, Heating Plant	Natural Gas Meter
Building 2070	Natural Gas Meter
Building 2080	Natural Gas Meter
Building 2090	Natural Gas Meter
Building 2095	Natural Gas Meter
Building 2110, Heating Plant	Natural Gas Meter
Building 2111E, Mech Room	Natural Gas Meter
Building 2111S, Mech Room	Natural Gas Meter
Building 2112, Motor Pool Washrack	Natural Gas Meter
Building 2117, MWR	Natural Gas Meter
Building 2135, DRMO	Natural Gas Meter
Building 2141	Natural Gas Meter
Building 2320, Heating Plant	Natural Gas Meter
Building 2322, 80 th OPS	Natural Gas Meter
Building 2330, Heating Plant East	Natural Gas Meter
Building 2330, Heating Plant West	Natural Gas Meter
Building 2384, AMU 3	Natural Gas Meter
Building 2407	Natural Gas Meter
Building 2412	Natural Gas Meter
Building 2414, Maintenance Dock Fuel Tank	Natural Gas Meter
Building 2416, AGE Maintenance	Natural Gas Meter
Building 2418, Paint Hanger	Natural Gas Meter
Building 2522	Natural Gas Meter
Building 2552, Pad Washrack	Natural Gas Meter
Building 2558, RAPCON	Natural Gas Meter
Building 2560S, Readiness	Natural Gas Meter
Building 2560W, Readiness	Natural Gas Meter
Building 4490S, Golf Course	Natural Gas Meter
Building 4490N, Golf Course	Natural Gas Meter
FTW-V008	Natural Gas Meter
FTW-V009	Natural Gas Meter
Bunker Hill	Natural Gas Meter
Capehart	Natural Gas Meter
Wherry East	Natural Gas Meter
Wherry West	Natural Gas Meter
102 Orion	Natural Gas Meter
104 Orion	Natural Gas Meter
106 Orion	Natural Gas Meter

Meter Location	Meter Description
108 Orion	Natural Gas Meter
112 Orion	Natural Gas Meter
102 Mars	Natural Gas Meter
130 Mercury	Natural Gas Meter
204A Century	Natural Gas Meter
115A Matador	Natural Gas Meter
125A Hercules	Natural Gas Meter
1A Nehls	Natural Gas Meter
115A Beaumont	Natural Gas Meter
115B Beaumont	Natural Gas Meter
85E Childress	Natural Gas Meter
85W Childress	Natural Gas Meter

J24.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J24.6 below.

TABLE 6

New Secondary Meters

Natural Gas Distribution System, Sheppard AFB

Meter Location	Building Number	Meter Description
Vet Clinic	60	Gas Meter
Multi Use Facility	1638	Gas Meter
Dorm	527	Gas Meter
Dorm	528	Gas Meter
Dorm	529	Gas Meter
Dorm	280	Gas Meter
Dorm	516	Gas Meter
Dorm	691	Gas Meter
Dorm	692	Gas Meter
Dorm	693	Gas Meter
Dorm	716	Gas Meter
Dorm	791	Gas Meter
Dorm	792	Gas Meter
Dorm	793	Gas Meter

J24.6 Submittals

The Contractor shall provide the Government submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name: 82th CES/CERS

Address: 231 9th Street, Sheppard AFB TX 76311

Phone number: (940) 676-6287

2. **Outage Report.** The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name: 82th CES/CERS

Address: 231 9th Street, Sheppard AFB TX 76311

Phone number: (940) 676-5689

3. **Meter Reading Report.** The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name: 82th CES/CERS

Address: 231 9th Street, Sheppard AFB TX 76311

Phone number: (940) 676-5689

4. **System Efficiency Report.** The Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. The Contracting Officer will determine the frequency of the report based on Government requirements. System efficiency reports shall be submitted to:

Name: 82th CES/CERS

Address: 231 9th Street, Sheppard AFB TX 76311

Phone number: (940) 676-5689

5. **Cathodic Protection Testing Report.** The Contractor shall submit a cathodic protection testing report in a format proposed by the Contractor and accepted by the Contracting Officer. The Contracting Officer will determine the frequency of the report based on Government requirements. Cathodic Protection Testing reports shall be submitted to:

Name: 82th CES/CEOE

Address: 231 9th Street, Sheppard AFB TX 76311

Phone number: (940) 676-5689

J24.7 Energy Saving Projects

IAW Paragraph C.3, Requirement, the following projects have been implemented by the Government for conservation purposes.

- None

J24.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Sheppard AFB boundaries.

J24.9 Off-Installation Sites

No off-installation sites are included in the sale of the Sheppard AFB natural gas distribution system.

J24.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

TABLE 7
Service Connections and Disconnections
Natural Gas Distribution System, Sheppard AFB

Location	Description
	The Government does not require any connection or disconnections during the transition period.

J24.11 Government Recognized System Deficiencies

Table 8 provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Sheppard AFB natural gas distribution system. If the natural gas distribution is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

TABLE 8
System Deficiencies
Natural Gas Distribution System, Sheppard AFB

Project Identifier/Location	Project Description
Replace Gas Mains Bridwell Ave	Replace approximately 5,000 linear feet of steel gas main located along Bridwell Rd from Missile Rd to Ave J.
Replace Gas Mains Hart/E/7th Ave	Replace approximately 3,500 linear feet of gas main along Hart St and Moates Ave, and 400 linear feet of gas main along 7th St